6560-50-P

### ENVIRONMENTAL PROTECTION AGENCY

**40 CFR Part 52** 

[EPA-R06-OAR-2019-0438; FRL-9997-72-Region 6]

Air Plan Approval; Arkansas; Interstate Transport Requirements for the 2010 1-Hour SO<sub>2</sub>

**NAAQS** 

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

SUMMARY: Pursuant to the Federal Clean Air Act (CAA or the Act), the Environmental Protection Agency (EPA) is proposing to approve the portion of Arkansas' State Implementation Plan (SIP) submittal addressing the CAA requirements pertaining to the "good neighbor" provision of the CAA for the 2010 Sulfur Dioxide (SO<sub>2</sub>) National Ambient Air Quality Standard (NAAQS). The "good neighbor" provision requires each state's implementation plan contain adequate provisions prohibiting emissions which will contribute significantly to nonattainment or interfere with maintenance of the 2010 SO<sub>2</sub> NAAQS in other states. EPA is proposing to determine that consistent with the CAA, Arkansas' SIP contains adequate provisions to ensure that air emissions in Arkansas will not contribute significantly to nonattainment or interfere with maintenance of the 2010 SO<sub>2</sub> NAAQS in any other state.

DATES: Written comments must be received on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** Submit your comments, identified by Docket No. EPA-R06-OAR-2019-0438, at <a href="http://www.regulations.gov">http://www.regulations.gov</a> or via email to <a href="mailto:salem.nevine@epa.gov">salem.nevine@epa.gov</a>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit

electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact Ms. Nevine Salem, (214) 665-7222, salem.nevine@epa.gov. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <a href="http://www2.epa.gov/dockets/commenting-epa-dockets">http://www2.epa.gov/dockets/commenting-epa-dockets</a>.

Docket: The index to the docket for this action is available electronically at www.regulations.gov and in hard copy at the EPA Region 6, 1201 Elm Street, Suite 500, Dallas, Texas. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (e.g., copyrighted material), and some may not be publicly available at either location (e.g., CBI).

FOR FURTHER INFORMATION CONTACT: Nevine Salem, EPA Region 6 Office, Infrastructure and Ozone Section, 1201 Elm Street, Suite 500, Dallas, TX 75270, (214) 665-7222, salem.nevine@epa.gov. To inspect the hard copy materials, please schedule an appointment with Ms. Salem or Mr. Bill Deese at (214) 665-7253.

**SUPPLEMENTARY INFORMATION:** Throughout this document "we," "us," and "our" means the EPA.

# I. Background

## A. General

On June 2, 2010, the EPA established a new primary 1-hour SO<sub>2</sub> NAAQS of 75 parts per billion (ppb), based on a three-year average of the annual 99<sup>th</sup> percentile of 1-hour daily maximum concentrations.<sup>1</sup> The CAA requires states to submit, within three years after promulgation of a new or revised NAAQS, SIPs meeting the applicable "infrastructure" elements of sections 110(a)(1) and (2). One of these applicable infrastructure elements, CAA section 110(a)(2)(D)(i), requires SIPs to contain "good neighbor" provisions to prohibit certain adverse air quality effects on neighboring states due to interstate transport of pollution.

## B. EPA's Infrastructure SIP Requirements

Whenever EPA promulgates a new or revised NAAQS, CAA section 110(a)(1) requires states to make SIP submissions to provide for the implementation, maintenance, and enforcement of the NAAQS. This particular type of SIP submission is commonly referred to as an "infrastructure SIP." These submissions must meet the various requirements of CAA section 110(a)(2), as applicable.

## C. Interstate Pollution Transport Requirements

Section 110(a)(2)(D)(i)(I) of the CAA requires a state's SIP to include adequate provisions prohibiting any emissions activity in the state that will contribute significantly to nonattainment, or interferes with maintenance, of the NAAQS in any downwind state. The EPA sometimes refers to these requirements as prong 1 (contribute significantly to nonattainment) and prong 2 (interference with maintenance), or jointly as the "good neighbor" provision of the CAA. Further information can be found in the Technical Support Document (TSD) for this rulemaking action, which is

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<sup>&</sup>lt;sup>1</sup> 75 FR 35520 (June 22, 2010).

available online at www.regulations.gov, Docket number EPA-R06-OAR-2019-0438.

## II. Summary of Arkansas' SIP Submittal and EPA's Evaluation

#### A. Arkansas' SIP Submittal:

On March 24, 2017, the Arkansas Department of Environmental Quality (ADEQ) submitted an infrastructure SIP (i-SIP) addressing how the existing Arkansas SIP provides for the implementation, maintenance, and enforcement of the 2010 1-hour SO<sub>2</sub> NAAQS.<sup>2</sup> On February 14, 2018 (83 FR 6470), the EPA approved most elements of Arkansas i-SIP submittal, but we took no action regarding the interstate transport provisions of section 110(a)(2)(D)(i)(I) pertaining to significant contribution to nonattainment (prong 1) and interference with maintenance (prong 2) of the NAAQS in other states.

The portions of Arkansas' March 24, 2017 SIP submittal addressing interstate transport (for section 110(a)(2)(D)(i)(I)) discuss how Arkansas will not contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to the 2010 1-hour SO<sub>2</sub> NAAQS. ADEQ evaluated SO<sub>2</sub> monitoring data within Arkansas and its surrounding states (Oklahoma, Texas, Louisiana, Mississippi, Missouri and Tennessee), and concluded that its emissions will not contribute significantly to nonattainment or interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state. In its submittal Arkansas described several existing SIP-approved measures and other federally enforceable source-specific measures, including permitting requirements, that apply to SO<sub>2</sub> sources within the state.

#### B. EPA's Evaluation:

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<sup>&</sup>lt;sup>2</sup> This proposed approval action is based on the information contained in the administrative record for this action and does not prejudge any other future EPA action that may make other determinations regarding any of the subject state's air quality status. Any such future actions, such as area designations under any NAAQS, will be based on their own administrative records and the EPA's analyses of information that becomes available at those times. Future available information may include, and is not limited to, monitoring data and modeling analyses conducted pursuant to the EPA's SO<sub>2</sub> Data Requirements Rule (80 FR 51052, August 21, 2015) and information submitted to the EPA by states, air agencies, and third-party stakeholders such as citizen groups and industry representatives.

For this CAA Section 110 (a)(2)(D)(i)(I) evaluation of the 2010 SO<sub>2</sub> NAAQS, EPA conducted a weight of evidence analysis for each prong separately,<sup>3</sup> including available information such as air quality, emission sources, modeling and emission trends in Arkansas and the adjacent nearby states that border Arkansas.

# 1. EPA's Prong 1 Evaluation—Contribute Significantly to Nonattainment:

Prong 1 of the "good neighbor" provisions requires states' plans to prohibit emissions that will contribute significantly to nonattainment of the NAAQS in another state. ADEQ confirms in its submission that Arkansas' SIP contains adequate provisions to prevent sources and other types of emission activities within the State from contributing significantly to nonattainment in other states with respect to the 2010 1-hour SO<sub>2</sub> standard. The EPA's evaluation<sup>4</sup> of whether Arkansas has met its Prong 1 transport obligations was accomplished by considering these factors:

- 1) SO<sub>2</sub> ambient air quality and emissions trends for Arkansas and neighboring states;
- 2) Potential ambient impacts of SO<sub>2</sub> emissions from certain facilities<sup>5</sup> in Arkansas on neighboring states based on available air dispersion modeling results of SO<sub>2</sub> sources in Arkansas and surrounding states and proximity analysis;
- 3) Analysis of the relationship of Arkansas sources with monitors in adjacent states which have recorded elevated SO<sub>2</sub> concentrations;
- Arkansas' SIP-approved regulations specific to SO<sub>2</sub> emissions and permit requirements;
   and,

<sup>&</sup>lt;sup>3</sup> In *North Carolina v. EPA*, 531 F.3d at 910-911 (D.C. Cir. 2008), the D.C. Circuit explained that the regulating authority must give prong 2 "independent significance" from prong 1 by evaluating the impact of upwind state emissions on downwind areas that, while currently in attainment, are at risk of future nonattainment.

 $<sup>^4</sup>$  A detailed review of EPA's evaluation of emissions, air monitoring data, other technical information, and rationale for proposed approval of this SIP revision as meeting CAA section 110(a)(2)(D)(i)(I) for the 2010 1-hour SO<sub>2</sub> NAAQS may be found in the Technical Support Document (TSD) attached to this docket.

 $<sup>^{5}</sup>$  The physical properties of  $SO_2$  result in relatively localized pollutant impacts very near the emissions source. Therefore, the EPA selected a spatial scale with dimensions up to 50 km from point sources.

5) Other SIP-approved or federally enforceable regulations which may reduce SO<sub>2</sub> emissions either directly or indirectly.

Based on EPA's analysis and evaluation of Arkansas' March 24, 2017 SIP submittal addressing the requirements of prong 1 of CAA section 110 (a)(2)(D)(i)(I) requirement, we agree with Arkansas' conclusion that the existing Arkansas SIP is adequate to prevent sources in the state from contributing significantly to nonattainment in another state with respect to the 2010 1-hour SO<sub>2</sub> NAAQS. EPA proposes to determine that Arkansas' March 24, 2017 SIP submittal satisfies the requirements of Prong 1 of CAA section 110(a)(2)(D)(i)(I). This proposed determination is based on the following considerations:

- There are no monitors recording violations of the 2010 SO<sub>2</sub> NAAQS located in Arkansas or within 50 km of its border. Additionally, all monitors within 50 km of the Arkansas border have design values (DV)<sup>6</sup> that are well below the 75 ppb standard and are unlikely to violate the standard in the future, indicating no potential concern for Prong 1. Current DVs for Arkansas' AQS SO<sub>2</sub> monitors within 50 km of another state's border have remained well below the 2010 1-hour SO<sub>2</sub> NAAQS from 2015-2017; similarly; SO<sub>2</sub> monitors for neighboring states (Oklahoma, Texas, Louisiana, Missouri and Tennessee) within 50 km of Arkansas have 2017 DVs below 2010 1-hour NAAQS standards;
- Modeling for the two Arkansas' Data Requirements Rule (DRR) sources<sup>7</sup> within 50 km of an adjacent state's border estimates impacts below the 2010 1-hour SO<sub>2</sub> NAAQS, and

<sup>6</sup> The design value is the 3-year average of the 99<sup>th</sup> percentile 1-hour daily maximums at a monitor. A control strategy should be designed to bring the value to attainment of the standard.

<sup>&</sup>lt;sup>7</sup> On August 21, 2015 (80 FR 51052), EPA promulgated air quality characterization requirements for the 2010 1-hour SO<sub>2</sub> NAAQS in the Data Requirements Rule (DRR). The DRR required state air agencies to characterize air quality, through air dispersion modeling or monitoring, in areas associated with sources that emitted greater than 2,000 tons per year (tpy) of SO<sub>2</sub>, or that have otherwise been listed under the DRR by EPA or state air agencies. In lieu of modeling or monitoring, state air agencies, by specified dates, could elect to impose federally -enforceable emissions limitations on those sources restricting their annual SO<sub>2</sub> emissions to 2,000 tpy or less, or provide documentation that the sources have been shut down.

- modeling for the DRR sources in surrounding states within 50 km of Arkansas indicates that areas around these sources do not violate the 2010 SO<sub>2</sub>NAAQS;
- Significant downward SO<sub>2</sub> emissions trends in Arkansas and its surrounding states (Texas, Oklahoma, Louisiana, Missouri, and Tennessee), when considered together with the other factors discussed as part of EPA's weight of evidence analysis, further decreases the probability that the State's sources are significantly contributing to other states' ability to attain the 2010 1-hour SO<sub>2</sub> NAAQS;
- An analysis of Arkansas sources emitting over 100 tons of SO<sub>2</sub> in 2017 show that these sources will not combine with emissions from the nearby sources in neighboring states to contribute significantly to nonattainment in those states. These analyses show the nearby sources have been modeled to show compliance of the 2010 standard or the modeling of the nearby sources included the Arkansas sources as background concentration or the Arkansas sources were well beyond 50 km from the adjacent states making it unlikely that Arkansas sources will contribute significantly to nonattainment in those states; and
- ePA also evaluated the most recent monitoring data for DRR monitors located in states adjacent to Arkansas and within 50 km of the state's border<sup>8</sup>. There are three monitors that fall into this category, one in Oklahoma and two in Missouri. The Oklahoma monitor's measurements meet the standard by a wide margin. So, Arkansas sources are not contributing to nonattainment or interfering with maintenance at that monitor. The monitors in Missouri recorded exceedances of the 2010 SO<sub>2</sub> NAAQS for 2018, the only complete year of data. The nearest Arkansas sources, however, are of relatively small size (less than

<sup>&</sup>lt;sup>8</sup> There are five DRR monitored sources within 50 km of Arkansas the border. Two DRR sources are in Arkansas (Flint Creek Power Plan, in Benton County, Arkansas and Plum Point Energy Station in Mississippi County, Arkansas). Three DRR sources are outside of Arkansas (GRDA Power Plant in Mayes, Oklahoma, Noranda Aluminum Inc and New Madrid Power Plant Marston both in New Madrid, Missouri).

300 tpy) and beyond the chosen 50 km spatial scale. Furthermore, the location of the Arkansas sources relative to Missouri DRR sources and the Missouri monitors that are recording exceedances are such that transport from the Arkansas sources could not significantly contribute to the monitors (or areas around the monitors) at the same time as the DRR sources are having their maximum impact. Therefore, the Arkansas sources will not have a significant impact on the measured exceedances; and,

Current Arkansas' statutes, SIP-approved and federal emissions control regulations will
continue to adequately control SO<sub>2</sub> emissions from sources within Arkansas.

Based on the analysis provided by Arkansas in its SIP submittal, the summary of EPA's evaluation, and EPA's supplemental Prong 1 analysis given in the TSD for this action, EPA proposes to find that sources within Arkansas will not significantly contribute to nonattainment of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state.

# 2. EPA's Prong 2 Evaluation – Interference with Maintenance

Prong 2 of the "good neighbor" provision requires state plans to prohibit emissions that will interfere with maintenance of a NAAQS in another state. For the Prong 2 analysis, EPA evaluated the SO<sub>2</sub> emissions trends for Arkansas, evaluated air quality data, and assessed how future sources of SO<sub>2</sub> are addressed through existing SIP-approved and federally enforceable regulations. As discussed in more detail in the TSD, current available modeling for areas in other states within 50 km of the Arkansas border show attainment of the 2010 1- hour SO<sub>2</sub> NAAQS supporting that sources within Arkansas will not interfere with neighboring states' ability to maintain the 2010 1-hour SO<sub>2</sub> NAAQS. Emissions over time are not anticipated to increase relative to the baseline emissions modeled. EPA believes that federal and state regulations and statutes directly and indirectly reduced emissions of SO<sub>2</sub> in Arkansas and help to ensure that the State does not interfere

with maintenance of the NAAQS in another state. SO<sub>2</sub> emissions from future major modifications and new major sources will be addressed by Arkansas' SIP-approved major NSR regulations described in more detail in the TSD. In addition, Arkansas has a SIP-approved minor NSR permit program addressing small emission sources of SO<sub>2</sub>. The permitting regulations contained within these programs are designed to ensure that emissions from these activities will not interfere with maintenance of the SO<sub>2</sub> NAAQS in Arkansas or any other state.

EPA proposes to determine that Arkansas' March 24, 2017 SIP submittal satisfies the requirements of Prong 2 of CAA section 110(a)(2)(D)(i)(I). This determination is based on the following considerations:

- Statewide SO<sub>2</sub> emissions from 2000 to 2017 in Arkansas have declined significantly and are
  expected to continue to decline, tending to reduce background concentrations in neighboring
  states;
- Current Arkansas statutes and SIP-approved measures and federal emissions control programs adequately control SO<sub>2</sub> emissions from sources within Arkansas;
- Arkansas' SIP-approved PSD and minor source NSR permit programs will address future new and modified SO<sub>2</sub> sources above major and minor permitting thresholds;
- Current 2015-2017 DVs for Air Quality System (AQS)<sup>9</sup> SO<sub>2</sub> monitors both in Arkansas within 50 km of another state's border and in neighboring states (Oklahoma, Texas, Louisiana, Missouri and Tennessee) within 50 km of Arkansas' border are below the 2010 1-hour SO<sub>2</sub> NAAQS; and

analysis, and prepare reports for congress as mandated by the Clean Air Act.

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<sup>&</sup>lt;sup>9</sup> The Air Quality System (AQS) contains ambient air pollution data collected by EPA, state, local, and tribal air pollution control agencies from over thousands of monitors. AQS also contains meteorological data, descriptive information about each monitoring station (including its geographic location and its operator), and data quality assurance/quality control information. AQS data is used to; assess air quality, assist in attainment/non-attainment designations, evaluate State Implementation Plans for non-attainment areas, perform modeling for permit review

• Available modeling for DRR sources within 50 km of Arkansas' border both within the State and in neighboring states demonstrates that Arkansas' larger point sources of SO<sub>2</sub> are do not interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in another state.
Based on the analysis provided by Arkansas in its SIP submittal, EPA's summary of its evaluation, and EPA's supplemental Prong 2 analysis given in the Technical Support Document (TSD) for this action, EPA proposes to find that sources within Arkansas will not interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state.

## **III. Proposed Action**

EPA is proposing to approve the remaining portions of the Arkansas' March 24, 2017 SIP submittal addressing interstate transport for the 2010 1-hour SO<sub>2</sub> NAAQS as these portions meet the requirements in section 110(a)(2)(i)(I) of the CAA. Based on the EPA's analysis of the state's submittal and the factors described in this document and the TSD, EPA proposes to determine Arkansas' SIP contains adequate provisions to ensure that air emissions within Arkansas will not contribute significantly to nonattainment or interfere with maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS in any other state.

## IV. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

• Is not a "significant regulatory action" subject to review by the Office of Management and

- Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866.
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate,
   disproportionate human health or environmental effects, using practicable and legally
   permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).
   In addition, this proposed rule, addressing Arkansas' interstate transport requirements for

the 2010 1-hour SO<sub>2</sub> NAAQS, does not have tribal implications as specified by Executive Order

13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian

country located in the state, and EPA notes that it will not impose substantial direct costs on tribal

governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Sulfur oxides.

Authority: 42 U.S.C. 7401 et seq.

Dated: August 1, 2019.

David Gray,

Acting Regional Administrator, Region 6.

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